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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/591,848

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Susumu Niwa

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YOUNG & THOMPSON
209 Madison Street
Suite 500
ALEXANDRIA, VA 22314

EXAMINER

KIRSCH, ANDREW THOMAS

ART UNIT

PAPER NUMBER

3781

MAIL DATE

DELIVERY MODE

08/21/2009

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/591,848	Applicant(s) NIWA ET AL.	
	Examiner ANDREW T. KIRSCH	Art Unit 3781	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-14 is/are pending in the application.
4a) Of the above claim(s) 2 is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1 and 3-14 is/are rejected.
- 7) ☐ Claim(s) ____ is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 05 September 2006 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. ____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. ____. |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date ____. | 6) <input type="checkbox"/> Other: ____. |

DETAILED ACTION

1. The amendment filed 5/15/2009 has been entered.

Claim Objections

2. The previous objections to the claims have been removed.
3. Claim 13 objected to because of the following informalities: on page 8, the second paragraph of the claim reads "the contract preventing portion" which appears to be a misspelling of "contact". Appropriate correction is required.
4. Claim 11 is objected to under 37 CFR 1.75(c), as being of improper dependent form for failing to further limit the subject matter of a previous claim. Applicant is required to cancel the claim(s), or amend the claim(s) to place the claim(s) in proper dependent form, or rewrite the claim(s) in independent form. Both claims 3 and 11 depend from claim 1 and include identical limitations.

Claim Rejections - 35 USC § 112

5. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.
6. Claim 12 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

7. Claim 12 recites the limitation "connection pieces" in line 3 of page 7. There is insufficient antecedent basis for this limitation in claim 1, which only previously mentioned a singular connection piece

Claim Rejections - 35 USC § 102

8. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

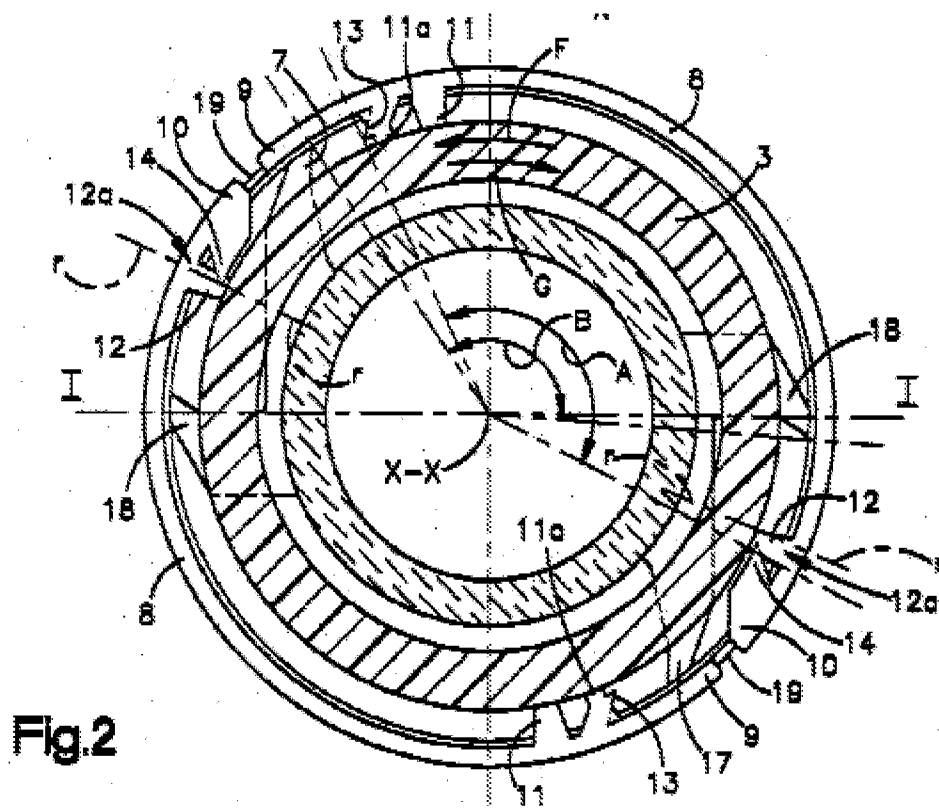
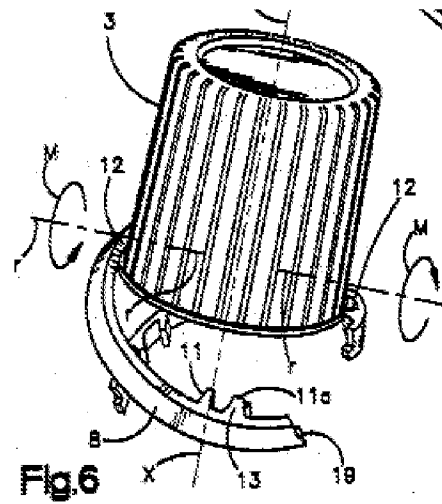
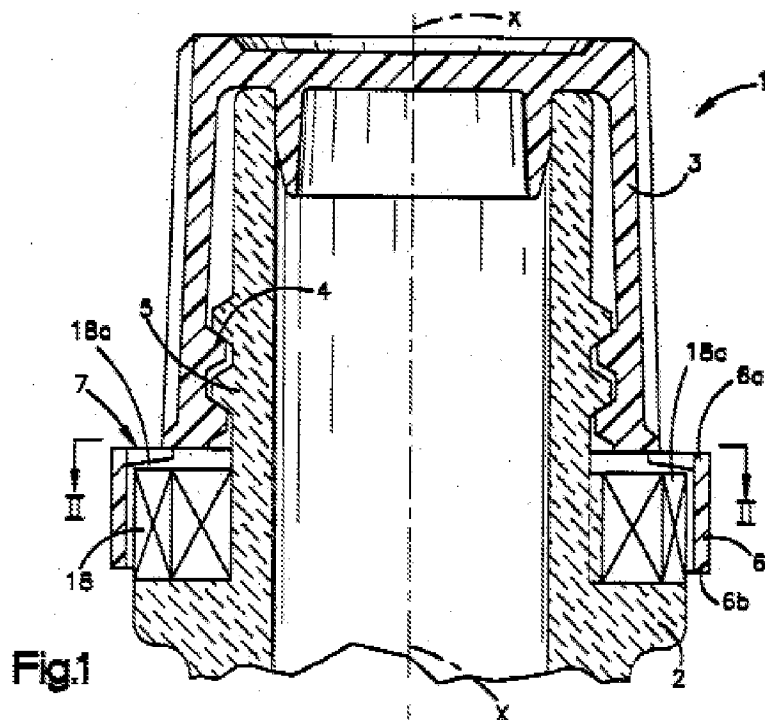
9. Claims 1, 5-6, 8 and 12 are rejected under 35 U.S.C. 102(b) as being anticipated by U.S. Patent No. 5,244,107 (Batteggazzore hereinafter).

10. In re claim 1, with reference to Figs. 1, 2 and 6 below, Batteggazzore discloses: An open/close cap (3) which is screwed (via threads 4) to a mouth portion of a pouring spout (5) of a packaging container (2) and adapted to open the mouth portion, the open/close cap comprising: a cap body screwed to an outer peripheral surface (5) of the mouth portion; and a band (6) attached to the cap body (3) so as to extend in a circumferential direction thereof so as to be engaged with the pouring spout, wherein, the band is provided with at least one portion for separating the band in the circumferential direction (19), end portions of the separated band are connected to each other by a connection piece (19), which connection piece is to be cut off (column 2, lines 50-55), at that one portion, a protruded portion (14) is formed to an inside of the band (6) so as to project toward the pouring spout, when the open/close cap is rotated in an

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opening direction with respect to the pouring spout, a forward side of the band (at 9) between which the connection piece (19) is snapped when rotated together with the cap body, and a rear side of the band (at 10) is prevented from rotating by engagement of the protruded portion (12) with a portion of the pouring spout, the connection pieces (19) are cut off in the circumferential direction thereof by a stress of the band generated by the engagement, and the band (6) is positioned below the lower surface of the cap body so as to be attached to the lower portion of the cap body by a coupling piece (12), so that when the cap is removed, the band is removed together with the cap body (see Fig. 6), the cap body remaining attached to the band by the coupling piece (12) with the coupling piece connecting the inner surface side of the band (6) and the lower surface of the cap body (3).

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11. In re claim 5, with reference to the Figs. above, Batteggazzore discloses the claimed invention including wherein a band shape maintaining member (11) for preventing crushing of the band in a radially inward direction through abutment of the inside portion of the band is disposed to the lower end of the cap body (3) in an inside portion of the band (6).

12. In re claim 6, with reference to the Figs. above, Batteggazzore discloses the claimed invention including wherein the band shape maintaining member is composed of a plurality of projections (11, one each side) intermittently disposed to the lower end surface of the in a circumferential direction thereof.

13. In re claim 8, with reference to the Figs. above, Batteggazzore discloses the claimed invention including wherein the cap body, the band shape maintaining member, the band, the connection piece, and the coupling piece are integrally formed by an injection molding process (column 1, lines 54-59).

14. In accordance to MPEP 2113, the method of forming the device is not germane to the issue of patentability of the device itself. Therefore, this limitation has not been given patentable weight. Please note that even though product-by-process claims are limited by and defined by the process, determination of patentability is based on the product itself. The patentability of a product, i.e. the cap, does not depend on its method of production, i.e. injection molding. In re Thorpe, 227 USPQ 964, 966 (Federal Circuit 1985).

15. In re claim 12, with reference to the Figs. above, Batteggazzore discloses the claimed invention including wherein the protruding portion comprises two overlapping

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trapezoidal protruded portions (12 and 14, see Fig. 2) projecting from the inner surface of the band (6) radially toward a center axis of the cap (3), the opening rotation of the cap body produces circumferential tension applied to the band to cut off the connection pieces (19) .with the connection pieces (19) being separated in the circumferential direction, and a larger one of the two overlapping trapezoidal protruded portions (14) displacing the band during the opening rotation (see Fig. 6) (column 3, lines 26-32), and the opening rotation of the cap body removes the cap body and the band from the pouring spout, the cap and band remaining integrally connected by the coupling piece (12) maintaining the cap body integrally connected with the band upon removal from the pouring spout (see Fig. 6).

Claim Rejections - 35 USC § 103

16. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

17. The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

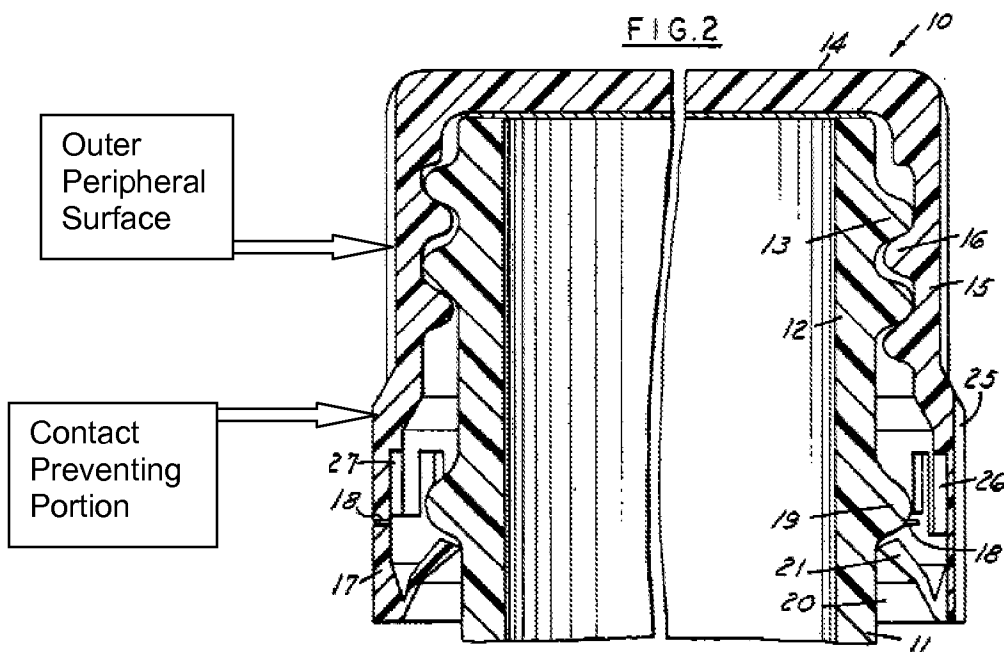
1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

18. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

19. Claims 3, 4, 9, 11, 13, and 14 are rejected under 35 U.S.C. 103(a) as being unpatentable over Battezzatore as applied to claim 1 above, and further in view of U.S. Patent No. 5,129,530 (Fuchs hereinafter).

20. In re claims 3 and 11, with reference to the Figs. above, Battezzatore discloses the claimed invention except wherein a contact preventing portion having a diameter equal to at least an outer surface of the band is provided for the outer peripheral surface of the cap body so as to extend outward from the outer peripheral surface.

21. However, with reference to Fig. 2 below, Fuchs discloses a contact preventing portion (see Fig. 2) having a diameter equal to an outer surface of a band (17) is provided for the outer peripheral surface of the cap body (15) so as to extend outward from the outer peripheral surface.



22. Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to have modified Battegazzore in view of Fuchs for the purposes of allowing the cap to accommodate certain features of the lower neck finish on a container.

23. In re claim 4, with reference to the Figs. above, Battegazzore in view of Fuchs discloses the claimed invention including wherein the contact preventing portion (see fig. 2) is formed by extending at least a lower portion (at 27) in a vertical direction of the cap body (downward).

24. In re claim 9, with reference to the Figs. above, Battegazzore in view of Fuchs discloses the claimed invention including wherein a contact preventing portion (see Fig. 2) having a diameter equal to an outer surface of the band (17) is provided for that outer peripheral surface of the cap body (15) so as to extend outward from the outer peripheral surface.

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25. In re claim 13, with reference to the Figs. above, Batteggazzore in view of Fuchs discloses the claimed invention including wherein An open/close cap (3) for opening and closing a pouring spout (5) of a packaging container (2), the open/close cap comprising: a cap body (3) having a closed upper surface (see Fig. 1), an opened lower portion, a screw-shaped male screw (4) formed in an inner surface of the cap body so as to be engageable with an outer peripheral surface of a mouth portion (5) of the pouring spout, the cap body, as viewed from an upper portion of the cap body, i) a cap closing includes the cap body being rotated in the clockwise direction, the cap body being screwed downward and sealing the mouth portion, and ii) a cap opening includes the cap body being rotated in the counterclockwise cap opening direction, the cap body being disengaged from the pouring spout (see Fig. 2); a contact preventing portion formed at the lower portion of the cap body (see Fig. 2 of Fuchs), the contact preventing portion having a lower portion protruding radially outward and an outer surface thereof inclined obliquely downward, the contact preventing portion defining a lower end surface of the cap body (as in re claim 3 above); a band (6) provided at the lower portion of the cap body (3) below the contact preventing portion and extending in a circumferential direction of the cap body (3) so as to be engaged with the pouring spout (5), the band divided into two band pieces (8); connection pieces (19) connecting circumferential ends of the two band pieces (8); coupling pieces (11, 12) connecting the two band pieces to the lower end surface of the cap body, the coupling pieces disposed on an inner periphery side of the band pieces and the lower surface of the cap body, a first of the coupling pieces (11) disposed on a front side in a cap loosening direction and

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having a portion with a reduced thickness and width to be cut off at a time when the open/close cap is rotated in the opening direction, a second of the coupling pieces (12) disposed on a rear side in the cap loosening direction having an increased thickness and width so as not to be cut off when the cap is rotated (column 2, lines 3-14); claw portions (13, 14) formed on the inner peripheral surface of each of the band pieces (8), one of the claw portions (13) disposed on a front end portion in the cap loosening direction and the another claw portion (14) disposed to a rear side of the one claw portion in the cap loosening direction, the claw portions protruding from the inner surfaces of the band pieces (8) and inclined in the cap loosening direction with respect to a radial direction directed to a center axis of the cap from the inner surface of the band pieces (see Fig. 2); and a protruded portion (14) on each band piece projecting from the inner surfaces of the band pieces radially toward the center axis of the cap, wherein, the opening rotation of the cap body produces circumferential tension applied to the band (6) by the claw portions (13, 14) to cut off the connection pieces (19) with the connection pieces being separated in the circumferential direction, and the protruded portions displacing the band pieces after cutting off the connection pieces during the opening rotation (see Fig. 6 @ M), and the opening rotation of the cap body removes the cap body and the band from the pouring spout, the cap (3) and band (6) remaining integrally connected with the first of the coupling pieces (11) being cut off by the opening rotation and the second of the coupling pieces (12) not being cut off by the opening rotation thereby maintaining the cap body integrally connected with the band upon removal from the pouring spout (column 2, lines 3-14).

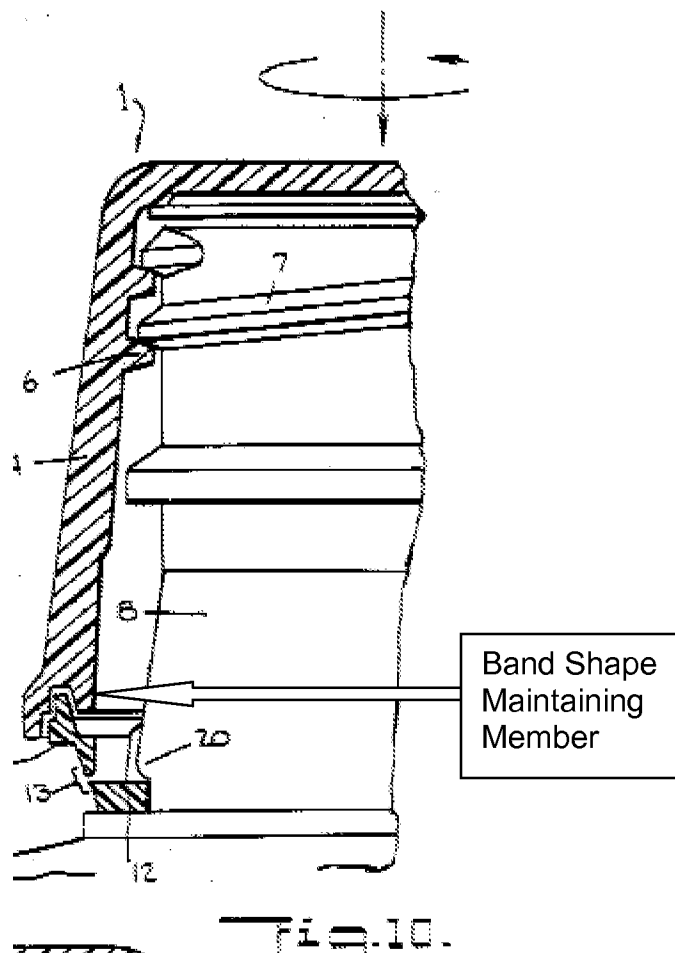
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26. In re claim 14, with reference to the Figs. above, Battegazzore in view of Fuchs discloses the claimed invention including wherein the protruding portions each comprise two overlapping trapezoidal protruded portions projecting from the inner surface of the band radially toward a center axis of the cap (as in re claim 12 above), and the opening rotation of the cap body (3) produces the circumferential tension applied to the band (6) to cut off the connection pieces (19) with the connection pieces being separated in the circumferential direction by a larger one of the two overlapping trapezoidal protruded portions displacing the band during the opening rotation (see Fig. 6 @ M).

27. Claims 7 and 10 are rejected under 35 U.S.C. 103(a) as being unpatentable over Battegazzore as applied to claim 5 above, and further in view of U.S. Patent No. 4,503,986 (Nixdorff et al. hereinafter).

28. In re claim 7, with reference to the Figs. above, Battegazzore discloses the claimed invention except wherein the band shape maintaining member is an annular member projected from the lower end of the cap body.

29. However, with reference to Fig. 10 below, Nixdorff et al. discloses a twist off cap closure for a container with a frangible ring in which an annular band shape maintaining member supports the band when the cap is closed on the container.



30. Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to have modified the cap of Batteggazzore to have included the annular band shape maintaining member as taught by Nixdorff et al. for the purposes of supporting the band when the cap is in the closed position.

31. In re claim 10, with reference to the Figs. above, Batteggazzore in view of Nixdorff et al. discloses a device capable of being made by: A method of manufacturing an open/close cap which comprises a cap body screwed to an outer peripheral surface of a pouring spout of a packaging container so as to open or close the pouring spout, a band disposed so as to extend in the circumferential direction of the cap body and coupled to

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the cap body through a coupling piece (as in re claim 1 above), and a band shape maintaining member disposed to a lower portion of the cap body for preventing crushing of the band in a radially inward direction through abutment of the inside portion of the band (as in re claim 7 above), and in which the band is provided, in a circumferential direction thereof, with at least one portion at which the band is separated in the circumferential direction, and at which end portions of the band are connected to each other by a connection piece, and the connection piece is cut off in the circumferential direction thereof by a stress caused at a time when the open/close cap is rotated with respect to the pouring spout and a protruded portion projecting toward the pouring spout from the inside of the band rides over a portion of the pouring spout (see Fig. 2), so that when the cap is removed, the band is removed together with the cap body, the cap body remaining attached to the band by the coupling piece, the coupling piece provided so as to connect the inner surface side of the band and the lower surface of the cap body (as in re claim 1), the manufacturing method including an injection molding step for integrally molding the cap body, the band shape maintaining member (Batteggazzore, column 1, lines 54-59), the connection piece and the coupling piece, wherein in the injection molding step, the band is connected to the cap body by the coupling piece so that a gap between the upper end of the band and the lower end of the cap body is formed to be larger than a dimension between the lower end of the band shape maintaining member and the lower end of the cap body (when combined as in re claim 7 above), and also including a pushing step for pushing the band toward the cap body, after the injection of the injection molding step, so that the band is positioned on the

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outer periphery side of the band shape maintaining member (See product by process recitation above in re claim 8).

Response to Arguments

32. Applicant's arguments filed 5/15/2009 have been fully considered but they are not persuasive.

33. Applicant argues on page 14 of the Remarks that band of the Tsujiguchi reference is not separated "in the circumferential direction." However, the term "circumferential direction" is inherently vague, in that it is unclear whether the plane of separation is normal to or aligned with the circumferential direction. Therefore, the examiner interpreted the term in a reasonable manner based upon the context of the claim.

34. Applicant's remaining arguments with respect to the claims have been considered but are moot in view of the new ground(s) of rejection which are necessitated by the amendment.

Conclusion

35. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

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A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to ANDREW T. KIRSCH whose telephone number is (571)270-5723. The examiner can normally be reached on M-F, 8am-5pm, Off alt. Fridays.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Anthony Stashick can be reached on 571-272-4561. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Andrew T. Kirsch/

Examiner, Art Unit 3781

/Anthony Stashick/
Supervisory Patent Examiner, Art
Unit 3781